

# PATENT ABSTRACTS OF JAPAN

(11)Publication 07-277924

n number :

(43)Date of 24.10.1995

publication of

application :

RECEIVED

MAR 05 2002

TECH CENTER 1600/2900

---

(51)Int.Cl.

A61K 7/02

A61K 7/00

---

(21)Application 06-085739

number :

(22)Date of 31.03.1994

filing :

(71)Applicant : SHISEIDO CO LTD

(72)Inventor : TAKAHASHI KAZUO

NAGANUMA MASAYUKI

KUMAGAI SHIGENORI

---

## (54) PRODUCTION OF SOLID POWDERY MAKEUP COSMETIC

(57)Abstract:

PURPOSE: To provide a method for producing a solid powdery makeup cosmetic excellent in touch of use with good moldability by blending an organopolysiloxane elastomer spherical powder therein.

CONSTITUTION: This method for producing a solid powdery makeup cosmetic is to add a solvent (preferably ethanol) in an amount of 20-80wt.% based on a cosmetic base containing 1.0-80.0wt.%, preferably 40.0-60.0wt.% organopolysiloxane elastomer spherical powder having 1.0-15.0 $\mu$ m average particle diameter and 5-20wt.% oil, e.g. hydrocarbon oils or silicone oils to the cosmetic base, provide a slurry, fill the resultant slurry in a container and then remove the solvent. A surfactant (preferred example: sorbitan sesquiisostearate) is preferably blended in the cosmetic so as to prevent the cosmetic powder from aggregating in the slurry and causing a change in the system.

---

## LEGAL STATUS

[Date of request for examination]

11.07.2000

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of

rejection]

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japanese Patent Office

---

## CLAIMS

---

[Claim(s)]

[Claim 1] The manufacture technique of the charge of solid powder makeup characterized by removing the aforementioned solvent after adding a solvent, considering as a slurry and, filling up the charge basis of makeup containing the organopolysiloxane elastomer spherical fine particles of 1.0-15.0 micrometers of mean particle diameters, and an oily medicine with this slurry subsequently to a container.

[Claim 2] The manufacture technique of the charge according to claim 1 of solid powder makeup that the loadings of the organopolysiloxane elastomer spherical fine particles of 1.0-15.0 micrometers of mean particle diameters are 1.0 - 80.0 % of the weight.

[Claim 3] The manufacture technique of the charge according to claim 2 of solid powder makeup that the loadings of the organopolysiloxane elastomer spherical fine particles of 1.0-15.0 micrometers of mean particle diameters are 40.0 - 60.0 % of the weight.

---

---

## DETAILED DESCRIPTION

---

[Detailed Description of the Invention]

[0001]

[Field of the Invention] this invention relates to the manufacture technique of the charge of solid powder makeup containing the organopolysiloxane elastomer spherical fine particles of 1.0-15.0 micrometers of mean particle diameters.

[0002]

[Description of the Prior Art] The charge of solid powder makeup makes the main constituent the fine particles for makeup, and an oily medicine, and composition of these components is changed according to the makeup purpose. Generally the press casting method which carries out [ the method ] a compression press after filling up a container etc. with a contents, and is conventionally solidified as a method of casting such a charge of solid powder makeup when there are comparatively few oily medicine contents (5-in constituent 25 % of the weight) has been performed.

[0003] On the other hand, as fine particles for makeup, by blending organopolysiloxane elastomer spherical fine particles, a skid is [ that there is nothing until now ] good, and the good charge of solid powder makeup of the use touch is obtained (JP,4-17162,B). However, since the charge of solid powder makeup which blended these fine particles had a bad moldability, it could not be cast by the usual dry-type casting method, but had the fault that it was difficult to produce

commercially. It is in the purpose of this invention solving such a conventional technical problem, and offering the technique of manufacturing the charge of solid powder makeup which blended organopolysiloxane elastomer spherical fine particles with a sufficient moldability.

[0004]

[Means for Solving the Problem] That is, after this invention adds a solvent, makes it a slurry and, subsequently to a container, fills up the charge basis of makeup containing the organopolysiloxane elastomer spherical fine particles of 1.0-15.0 micrometers of mean particle diameters, and an oily medicine with this slurry, it is the manufacture technique of the charge of solid powder makeup characterized by removing the aforementioned solvent.

[0005] Hereafter, the configuration of this invention is explained. The organopolysiloxane elastomer spherical fine particles of 1.0-15.0 micrometers of the mean particle diameters used by this invention are components required in order to smooth the feeling of inunction to the skin of the charge of makeup of this invention and to raise the lightness of mileage, and the usability of \*\* and a soft feeling in the least. This component means what is indicated by JP,4-66446,B, JP,2-243612,A, and JP,4-17162,B, and training fill E-505C and training fill E-506C (tradename by Dow Corning Toray Silicone, Inc.) are mentioned as commercial elegance, for example. Preferably, the grain size of this component needs to be [ 1.0-15.0-micrometer ] 1.0-10.0 micrometers in the charge of makeup of this invention in order to give admiration and the healthy and natural feeling of color gently, a smoothness and. In less than 1.0 micrometers, a smoothness falls, and if 15.0 micrometers is exceeded, admiration will fall gently.

[0006] In this invention, the loadings of organopolysiloxane elastomer spherical fine particles are 40.0 - 60.0 % of the weight preferably 1.0 to 80.0% of the weight. If the enhancement effect of the use touch has few loadings at less than 1.0 % of the weight and 80.0 % of the weight is exceeded, a moldability will fall.

[0007] In the charge of solid powder makeup of this invention, combination of powder other than organopolysiloxane elastomer spherical fine particles is possible in the domain which does not spoil the effect of this invention other than organopolysiloxane elastomer spherical fine particles. the powder used by this invention \*\*\*\*\* -- organic powder, such as inorganic powder, such as talc and a sericite, polyamide powder, polyethylene powder, and silicone resin powder, a titanium dioxide, an iron oxide, and a yellow iron oxide -- low -- organic pigments, such as inorganic pigments, such as degree titanium oxide, ultramarine blue, and Berlin blue, the red of No. 201, an orange of No. 203, the yellow of No. 4, and blue of No. 1, etc. are mentioned These may use one sort and may use two or more sorts. Processing powder, such as hydrophobing processing powder, can also be used as powder. The loadings of the whole powder containing organopolysiloxane elastomer spherical fine particles are 50.0 - 100.0 % of the weight to the amount of the whole charge of solid powder makeup.

[0008] As an oily medicine used in this invention, silicon oil, such as dimethylpolysiloxane of about 5-100 cses hydrocarbon oils [ in a liquid paraffin, squalane, a polyp ten, a paraffine wax, a micro crystalline wax, a ceresin wax, the end of polyethylene etc. ],, for example, viscosity, is mentioned, for example. Although especially the loadings of these oily medicines are not restricted, generally 5 - 20 % of the weight is desirable.

[0009] As a solvent used in this invention, ethanol, a hexane, etc. are especially mentioned, among these ethanol is desirable. The loadings of a solvent are usually 20 - 80 % of the weight to the charge basis of makeup, and, in the case of ethanol, its about 60 % of the weight is especially the optimum.

[0010] In addition to this, a surfactant is blended with the charge of solid powder makeup of this invention. A surfactant is blended in order to prevent the fine particles for makeup condensing and

causing change of a system in the slurry which was mixed with the solvent and obtained the charge basis of powder makeup, and its thing of the shape of high ordinary temperature liquid of a dispersion effect is desirable. As a desirable surfactant, sorbitan sesqui-isostearate, sorbitan monoisostearate, etc. are mentioned, for example. The loadings of a surfactant are 0 - 3.0 % of the weight among the charge whole quantity of solid powder makeup makeup.

[0011] In the charge of solid powder makeup makeup of this invention, it is the domain which does not spoil the effect of this invention other than the above-mentioned indispensable component, and combination of antiseptics, an antioxidant, a medicine, perfume, an ultraviolet ray absorbent, a \*\*\*\* agent, etc. is possible. However, it is not limited to the above-mentioned component that what is necessary is just a component applicable to common cosmetics.

[0012] In order to enforce this invention technique, the fine particles for makeup, the oily medicine, and surfactant containing organopolysiloxane elastomer spherical fine particles are first mixed uniformly by the conventional method, and the charge basis of powder makeup is prepared. Subsequently, this charge basis of powder makeup is mixed with a solvent, and it considers as a slurry-like object. Although the amount of a solvent changes also with composition of the fine particles for makeup, and amounts of an oily medicine, preferably [ that the restoration to a sampling, a container, etc. of air from a slurry-like object is made to become easy viscosity ], and generally its 0.5 to 1.5 times (weight) of the charge basis of powder makeup are desirable. If the amount of solvents increases too much, while xeransis will take a long time, it crocodiles after xeransis, and loss of weight of a contents is produced, and shock resistance also falls. Furthermore, if a light vibration is again given the grade from which packing does not fall at the time of restoration when flares, such as a container of a slurry-like object, are bad, it can be filled up uniformly. A solvent is removed and it is made to solidify, after filling up a container etc. in this way. elimination of a solvent -- a conventional method, for example, an air drying, and warming -- it is carried out by xeransis, warm air xeransis, vacuum suction, etc. Such manufacture technique is called the wet casting method, and the detail is indicated by JP,57-60004,B, JP,61-54766,B, etc.

[0013] The charge of solid powder makeup makeup obtained by the above technique can be used as foundation, cheek red, eye shadow, a face powder, etc.

[0014]

[Example] Although an example is given and this invention is explained still in detail hereafter, these do not limit this invention at all. In addition, loadings are weight %.

Example 1 Solid powder foundation (1) Organopolysiloxane elastomer spherical fine particles (Training fill E506C) 40.0 Weight % (2) Talc 38.0 (3) Titanium oxide 6.5 (4) Red ocher 0.6 (5) Yellow iron oxide 1.9 (6) Black iron oxide 0.15 (7) Antiseptics 0.4 (8) Dimethylpolysiloxane 1.0 (9) Malate diisostearyl 5.0 (10) Trimethylol-propane \*\*\*\*\* stearate 5.0 (11) Sorbitan sesqui-isostearate 1.0 (12) Antioxidant Optimum dose (13) Perfume Optimum dose [0015] Uniform mixture of the fine particles for [process] makeup, an oily medicine, a surfactant, and the antioxidant is carried out, and it considers as the charge basis of powder makeup. In addition, uniform mixture of the ethanol is carried out 60% of the weight to the charge basis of powder makeup, and it considers as a slurry-like object at this. An inside pan is filled up with this, compression molding is carried out using a molding head (50-80kg of \*\*\*\*\*s), and ethanol is simultaneously attracted from the rear face of a molding head. A molding is dried at 37 degrees C after suction half a day.

[0016]

Example 2 Solid face powder (1) Organopolysiloxane elastomer spherical fine particles 40.0 Weight % (training fill E506C)  
(2) Talc 49.5 (3) Titanium dioxide 5.0 (4) Red ocher 0.16 (5) Yellow iron oxide 0.15 (6) Antiseptics 0.2

(7) Malate diisostearyl 2.0 (8) Trimethylol-propane \*\*\*\*\* stearate 2.5 (9) Antioxidant Optimum dose (10) Perfume Optimum dose [0017] The solid face powder was obtained by the wet casting method by the same technique as the [process] example 1.

[0018]

Example 1 of a comparison Solid powder foundation (1) Organopolysiloxane elastomer spherical fine particles 40.0 Weight % (training fill E506C)

(2) Talc 38.0 (3) Titanium oxide 6.5 (4) Red ochre 0.6 (5) Yellow iron oxide 1.9 (6) Black iron oxide 0.15 (7) Antiseptics 0.4 (8) Dimethylpolysiloxane 1.0 (9) Malate diisostearyl 5.0 (10) Trimethylol-propane \*\*\*\*\* stearate 5.0 (11) Sorbitan sesqui-isostearate 1.0 (12) Antioxidant Optimum dose (13) Perfume Optimum dose [0019] [Process] The conventional press molding was performed and manufactured.

[0020]

Example 2 of a comparison Solid powder foundation (1) Talc 78.0 Weight % (2) Titanium oxide 6.5 (3) Red ochre 0.6 (4) Yellow iron oxide 1.9 (5) Black iron oxide 0.15 (6) Antiseptics 0.4 (7)

Dimethylpolysiloxane 1.0 (8) Malate diisostearyl 5.0 (9) Trimethylol-propane \*\*\*\*\* stearate 5.0 (10) Sorbitan sesqui-isostearate 1.0 (11) Antioxidant Optimum dose (12) Perfume Optimum dose

[0021] Solid powder foundation was obtained by the wet casting method by the same technique as the [process] example 1.

[0022] It compared [ charge / of the examples 1 and 2 and the examples 1 and 2 of a comparison / of makeup ] about a smoothness, the lightness of mileage, and shock resistance. The data of Table 1 have a charge of makeup used for 30 female panels, and test the lightness of a smoothness and mileage. An error criterion is as follows.

O : -- good \*\* : -- a little good x : -- [0023] [ bad ] Moreover, by what time fall it was divided according to the drop test from the height of 1m estimated shock resistance. An error criterion is as follows.

O Less than [ more than :11 time O:7-10 time \*\*:5-6 time x:4 time ] [0024]

[Table 1]

\*\*\*\*\* Example 1 Example 2

Example 1 of a comparison The example 2 of a comparison

\*\*\*\*\* smoothness O O O x Lightness of mileage O O O \*\* shock resistance O O x

O \*\*\*\*\* [0025]

[Effect of the Invention] As explained above, according to the technique of this invention, the charge of solid powder makeup which blended organopolysiloxane elastomer spherical fine particles can be manufactured with a sufficient moldability, and the very good charge product of solid powder makeup of the use touch can be obtained.

---